

wherein Z is a carbon atom or R¹ - B fragment

p is 1, 2 or 3

q is 3-p and

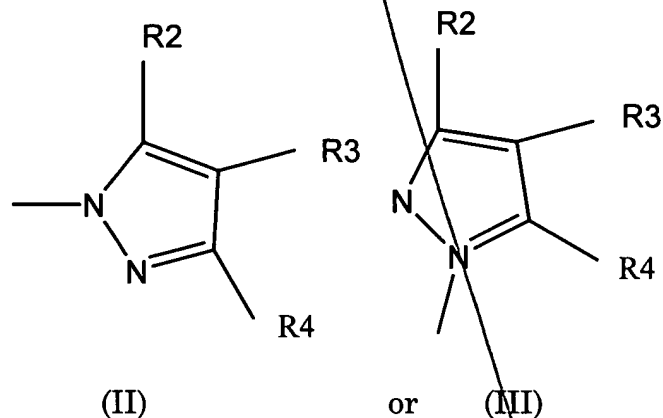
A is a counterion

R¹ is: (i) hydrogen, aryl or aralkyl each optionally substituted

with from one to five halogen or C₁ to C₆ alkyl groups; or (ii) C₁ to C₆ alkyl, C₁ to C₆ alkenyl or C₁ to C₆ alkynyl each optionally substituted with one or more halogen atoms

each L is covalently bound to Z and is independently selected

from a group of the formula (II) or (III)



in which R², R³ and R⁴ are independently selected from:

- (i) halogen, cyano, nitro, sulphonyl, amino, C₁ to C₆ alkylamino, C₁ to C₆ alkylamido, carboxyl, C₁ to C₆ alkyloxycarbonyl, hydroxy,

C₁ to C₆ alkoxy, C₁ to C₆ alkylcarbonyloxy, C₁ to C₆ alkylcarbonyl C₁ to C₆ haloalkoxy and hydrogen;

(ii) aryl or aralkyl each optionally substituted on the aryl ring or, for aralkyl, on the alkylene chain with from one or more of the groups mentioned under (i) above; and

(iii) C₁ to C₆ alkyl, C₁ to C₆ alkenyl or C₁ to C₆ alkenyl or C₁ to C₆ alkynyl each optionally substituted with one or more of the groups mentioned under (i) and (ii) above;

R⁴ and or R² is -(CX₂)_nX wherein n is 0 or a positive integer from 1 to 6 and X is halogen; or R⁴ is orthodihalogenated or orthodiperhalomethylated aryl, optionally further substituted on the aryl ring; or

R² and R³ or R³ and R⁴ are linked so as to form a fused aromatic or non-aromatic ring system with the pyrazolyl ring of L; and

M is a trivalent lanthanide metal ion.

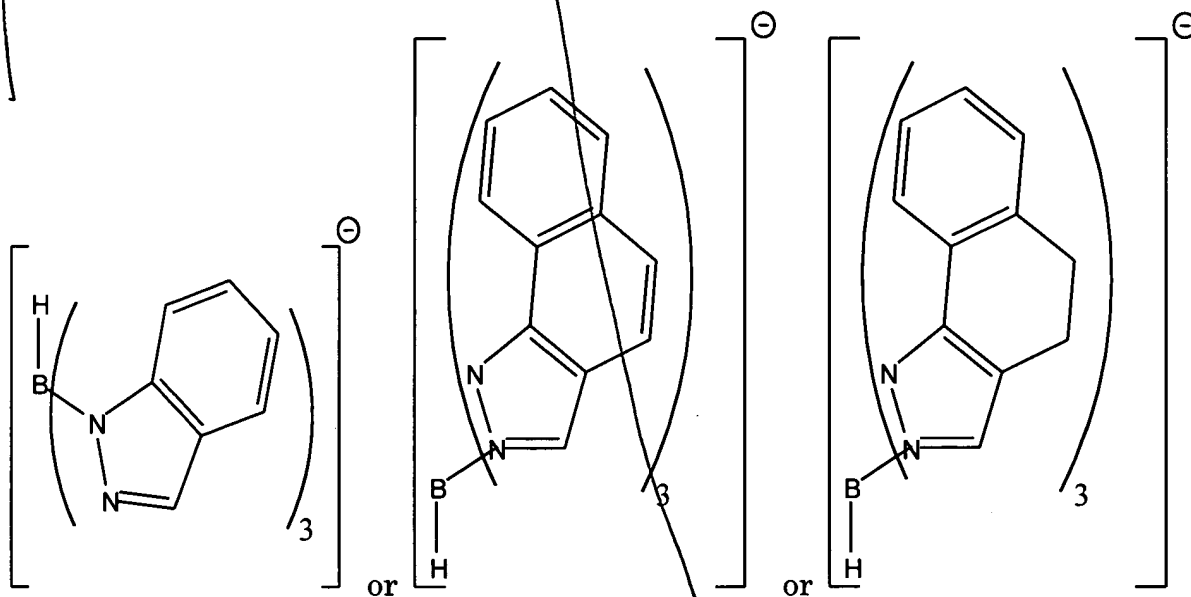
48. Complex as claimed in claim 47, wherein M is Tb, Ce, Eu, Er, Gd, Tm, Sm or Nd.

49. Complex as claimed in claim 47, wherein R⁴ is trifluoromethyl.

50. Complex as claimed in claim 47, wherein R^3 is hydrogen and R^2 is trifluoromethyl.

51. Complex as claimed in claim 47, wherein Z is H-B.

52. Complex as claimed in claim 47, wherein ZL_3 is



53. Complex as claimed in claim 47, wherein A is CF_3SO_3^- , halide, nitrate or perchlorate.